

Message

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**From:** Zartarian, Valerie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=81096FE8DD024BDF935DEC292BF44F9D-ZARTARIAN, VALERIE]  
**Sent:** 8/28/2018 1:25:18 PM  
**To:** Rodan, Bruce [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=Rodan, Bruce]; Garland, Jay [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8344688361ec4461b89037afbf43f5aa-Garland, Jay]; Schock, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8aecc78bfe4a4b1aaea5db7146abb41f-Schock, Michael]; Ross, Mary [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=98359cd1f66f46ec91d327e99a3c6909-Ross, Mary]; Lytle, Darren [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fdde061dab3e4da78aacee87490f09b9-Lytle, Darren]; Triantafyllidou, Simoni [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0c7062e9509a4c0d86074cb39f959d0c-Triantafyllidou, Simoni]; Murray, Regan [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=4b06d968152a4cefb83c9864ff5c89c6-Murray, Regan]; Mattas-Curry, Lahne [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=d4369134369c4390991cf783c5c578aa-Mattas-Curry, Lahne]; Brown, James [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=bb956ec2491e4620b3eef990a38a57b8-Brown, James\_667f44daa6]; Sonich-Mullin, Cynthia [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=e634d93d2e0741aaaba1a04e14b347a6-Sonich-Mullin, Cynthia]; Orme-Zavaleta, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3c5a11dc377411595e5b24b5d96146b-Orme-Zavaleta, Jennifer]; Benforado, Jay [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=e3adeee7efce4889992919103f16e006-Benforado, Jay]; Shaw, Denise [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=556182b3879649039b11d36e5e09d9aa-Shaw, Denise]; Shao, Nicole [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=36641c9d93784a1899d4e3640f8c6ac3-Shao, nicole]; Flowers, Lynn [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=1a4411c874d041b9a8badfc32b91bd70-Flowers, Lynn]; Deener, Kathleen [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b9a2ff1c086249ea8f6414afde8a5e54-Deener, Kathleen]; Impellitteri, Christopher [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=a2b830d5f8c64e99aa47f508e871ffd4-Impellitteri, Chistopher]; Hauchman, Fred [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f8bf9785f32048ccad5f60b25a72017d-Hauchman, Fred]; Bahadori, Tina [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7da7967dcafb4c5bbc39c666fee31ec3-Bahadori, Tina]; Thomas, David [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=6d396b5a097f4f5882c6c1795d969490-Thomas, David]; Fleming, Megan [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=14b4c2e10bf84f1fa9a3f91f5ca1c4c0-Fleming, Megan]; Watkins, Tim [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=4cbd1c572f584fd7b0a3b5945f118558-Watkins, Tim]; Burden, Susan [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=aca392a7aea849bfbce1fdbc1a1ed88e-Burden, Susan]; Hiscock, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=992b117a1981415689779a494e938f97-Hiscock, Michael]; Slimak, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=197d6551afaf4d90b087c4d5bf62b53c-Slimak, Mike]; Cascio, Wayne [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=a1bd931ca2f84ea8ac2f4c44538f3589-Cascio, Wayne]; Holt, Kay [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=60d01f6d16bb4d7fb1ad488c35448c40-Holt, Vanessa Kay]; Vette, Alan

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**Subject:** fyi FW: new JAMA Pediatric article: "Effect of Residential Lead-Hazard Interventions on Childhood Blood Lead Concentrations and Neurobehavioral Outcomes A Randomized Clinical Trial"

FYI for ORD Pb coordination team

**From:** Suero, Maryann

**Sent:** Tuesday, August 28, 2018 9:09 AM

**To:** Martig, Anton (Tony) <martig.anton@epa.gov>; Avant, Emma <avant.emma@epa.gov>; Bessler, Scott <Bessler.Scott@epa.gov>; Delisio, Edward <delisio.edward@epa.gov>; Koralewska, Ludmilla <koralewska.ludmilla@epa.gov>; Klevs, Mardi <klevs.mardi@epa.gov>; McAuliffe, Mary <mcauliffe.mary@epa.gov>; Nash, James <nash.james@epa.gov>; Nelson, Leverett <nelson.leverett@epa.gov>; Rouse, Tonesia <rouse.tonesia@epa.gov>; Star, David <star.david@epa.gov>; Turpin, David <turpin.david@epa.gov>; Wiebenga, Marlyse <Wiebenga.Marlyse@epa.gov>; Zander, Rachel <Zander.Rachel@epa.gov>; Zartarian, Valerie <Zartarian.Valerie@epa.gov>; Walts, Alan <walts.alan@epa.gov>; Firestone, Michael <Firestone.Michael@epa.gov>  
**Subject:** FYI JAMA Pediatrics: Effect of Residential Lead-Hazard Interventions on Childhood Blood Lead Concentrations and Neurobehavioral Outcomes A Randomized Clinical Trial

**Effect of Residential Lead-Hazard Interventions on Childhood Blood Lead Concentrations and Neurobehavioral Outcomes A Randomized Clinical Trial**

Joseph M. Braun, PhD; Richard Hornung, DrPH; Aimin Chen, MD, PhD; et al  
JAMA Pediatr. Published online August 27, 2018. doi:10.1001/jamapediatrics.2018.2382  
<https://jamanetwork.com/journals/jamapediatrics/article-abstract/2696978>

**Key Points**

**Question** Can residential lead hazards be reduced to prevent childhood lead poisoning and associated neurobehavioral deficits?

**Findings** In this randomized clinical trial of 355 pregnant women and their children, a comprehensive residential intervention reduced dust lead loadings and, among non-Hispanic black children, blood lead concentrations but did not substantively improve neurobehavioral outcomes.

**Meaning** Reducing residential lead exposures and, among those at higher risk of lead poisoning, blood lead concentrations, is possible without elevating childhood body lead burden.

**Abstract**

**Importance** Childhood lead exposure is associated with neurobehavioral deficits. The effect of a residential lead hazard intervention on blood lead concentrations and neurobehavioral development remains unknown.

**Objective** To determine whether a comprehensive residential lead-exposure reduction intervention completed during pregnancy could decrease residential dust lead loadings, prevent elevated blood lead concentrations, and improve childhood neurobehavioral outcomes.

**Design, Setting, and Participants** This longitudinal, community-based randomized clinical trial of pregnant women and their children, the Health Outcomes and Measures of the Environment (HOME) Study, was conducted between March 1, 2003, and January 31, 2006. Pregnant women attending 1 of 9 prenatal care clinics affiliated with 3 hospitals in the Cincinnati, Ohio, metropolitan area were recruited. Of the 1263 eligible women, 468 (37.0%) agreed to participate and 355 women (75.8%) were randomized in this intention-to-treat analysis. Participants were randomly assigned to receive 1 of 2 interventions designed to reduce residential lead or injury hazards. Follow-up on children took place at 1, 2, 3, 4, 5, and 8 years of age. Data analysis was performed from September 2, 2017, to May 6, 2018.

**Main Outcomes and Measures** Residential dust lead loadings were measured at baseline and when children were 1 and 2 years of age. At 1, 2, 3, 4, 5, and 8 years of age, the children's blood lead concentrations as well as behavior, cognition, and executive functions were assessed.

**Results** Of the 355 women randomized, 174 (49.0%) were assigned to the intervention group (mean [SD] age at delivery, 30.1 (5.5) years; 119 [68.3%] self-identified as non-Hispanic white) and 181 (50.9%) to the control group (mean [SD] age at delivery, 29.2 [5.7] years; 123 [67.9%] self-identified as non-Hispanic white). The intervention reduced the dust lead loadings for the floor (24%; 95% CI, -43% to 1%), windowsill (40%; 95% CI, -60% to -11%), and window trough (47%; 95% CI, -68% to -10%) surfaces. The intervention did not statistically significantly reduce childhood blood lead concentrations (-6%; 95% CI, -17% to 6%;  $P = .29$ ). Neurobehavioral test scores were not statistically different between children in the intervention group than those in the control group except for a reduction in anxiety scores in the intervention group ( $\beta = -1.6$ ; 95% CI, -3.2 to -0.1;  $P = .04$ ).

**Conclusions and Relevance** Residential lead exposures, as well as blood lead concentrations in non-Hispanic black children, were reduced through a comprehensive lead-hazard intervention without elevating the lead body burden. However, this decrease did not result in substantive neurobehavioral improvements in children.

\*\*\*News blurb on this article can be found at <http://www.providencejournal.com/news/20180827/aggressive-action-on-lead-dust-reduces-hazards-study-shows>

-----Original Appointment-----

**From:** Rodan, Bruce

**Sent:** Monday, February 06, 2017 4:07 PM

**To:** Rodan, Bruce; Garland, Jay; Schock, Michael; Ross, Mary; Lytle, Darren; Triantafyllidou, Simoni; Murray, Regan; Mattas-Curry, Lahne; Brown, James; Sonich-Mullin, Cynthia; Zartarian, Valerie; Orme-Zavaleta, Jennifer; Benforado, Jay; Shaw, Denise; Shao, Nicole; Flowers, Lynn; Deener, Kathleen; Impellitteri, Christopher; Hauchman, Fred; Bahadori, Tina; Thomas, David; Fleming, Megan; Watkins, Tim; Burden, Susan; Hiscock, Michael; Slimak, Michael; Cascio, Wayne; Holt, Kay; Vette, Alan; Frithsen, Jeff; vanDrunick, Suzanne; Geller, Andrew; Stanek, Lindsay; Kirrane, Ellen; D'Amico, Louis; Wan, Yongshan

**Cc:** Speth, Thomas; Parshionikar, Sandhya; Pressman, Jonathan; Maguire, Megan; Saterson, Kathryn; Bradham, Karen; Tornero-Velez, Rogelio; Tulve, Nicolle; Hubal, Elaine; Buckley, Timothy; Medina-Vera, Myriam; Xue, Jianping; Cashdollar, Jennifer; Grimm, Ann; Kenneke, John; Guiseppi-Elie, Annette; Morgan, Ardra; Doa, Maria; O'Mara, Kate; Russo, Bill; George, Elizabeth

**Subject:** ORD Lead Coordination

**When:** Wednesday, August 29, 2018 1:00 PM-2:00 PM (UTC-05:00) Eastern Time (US & Canada).

**Where:** DCRoomRRB41213/ORD; call-in Ex. 6 Personal Privacy (PP)